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ABSTRACT

Over the past decade, many university-based administrator-preparation programs have evolved into curricula delivered through cohorts of about 20 to 25 students. However, little evidence exists about the long-term effect of cohort experience on aspiring principals' future professional practice. Anecdotal evidence suggests that students in cohorts experience a greater sense of inclusiveness, more opportunities for collaboration and professional networking, and enhanced academic performance than in previous higher educational experiences. Impediments that can impede learning, however, include collusion, negative group climate and norms, assumed or assigned roles of team members, and communication and problem-solving styles. Strategies for creating effective cohorts involve creating an environment in which participants acknowledge the mutual risk, and establish the sense of safety in facing the risk, of presenting new ideas and views. Educators need to be aware of psychological baggage that adult students can bring with them and take necessary steps to diminish any negative influences that can impact learning. Further research needs to be done to determine how effective the cohort experience is in transferring knowledge gained into professional practice, what types of measures should be used to determine this and other factors, and what type of database should be used. (Contains 44 references.) (RT)

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ISSUES RELATED TO THE EFFECTS OF COHORTS ON LEARNERS

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Over the past decade, many university-based administrator-preparation programs have evolved into coherent, sequenced curriculums delivered through cohorts of about 20 to 25 students (Barnett, Basom, Yerkes, & Norris, 2000; Kelley & Peterson, 2000). A premise for using cohorts is that keeping students together as a unique group of learners enhances professional learning and skill development (Norris & Barnett, 1994; Peel, Wallace, Buckner, Wrenn, & Evans, 1998). Another assertion is that the cohort structure provides excellent opportunities for aspiring school leaders to learn and practice skills in corporate goal setting, community building, conflict resolution, and culture management (Geltner, 1994; Milstein & Krueger, 1997). Thus, the use of cohorts in the educational leadership preparation programs often is recommended highly (Milstein & Krueger, 1993; Murphy, 1993, 2001).

Using the cohort model effectively, however, requires program coherence (Dick & Carey, 1990; Muth, forthcoming), and faculty must be involved in identifying and implementing critical elements that generate optimum learning environments for both faculty and students (Barnett et al., 2000; Kelley & Peterson, 2000). Effective use of cohorts in higher education requires considerable collaboration and additional work for faculty (Muth & Barnett, 2001).

While cohorts are organizational structures used in higher education to deliver instruction suited to the unique learning needs of adults (Barnett & Muse, 1993), little empirical evidence exists about the long-term effects of the cohort experience on aspiring principals' future professional practice (Goldschmid & Berberat, 1989; Jackson, 2001; Muth & Barnett, 2001). Thus, the question posed by this paper is, do cohort structures

enhance student learning that transfers to professional practice (Browne-Ferrigno, 2001; Muth & Barnett, 2001)?

Before continuing, an important distinction needs to be made about cohorts. Although some leadership preparations programs use the word *cohort* to describe a group of students selected from a particular local educational agency, those students may or may not begin and complete their programs together as an intact learning community. As they progress through their programs, they often interact with different students in various classes. On the contrary, this paper addresses learning in "closed cohorts" (Norris & Barnett, 1994) in which students remain together throughout their preparation program as a single, identifiable group.

Current Research on Learning in Cohorts

Anecdotal evidence, usually provided by students and faculty at the close of programs, suggests that the long-term association of learners in a cohort fosters interpersonal relationships, creates caring learning climates, and supports students' competence and sense of well being (Crow & Glascock, 1995; Norris & Barnett, 1994; Peel et al., 1998). Studies about group dynamics, group affiliation, participant interaction, and personal relationships within cohorts (Basom, Yerkes, Norris, & Barnett, 1995; Norris & Barnett, 1994; Reynolds, 1993) also show that the culture of a well-functioning cohort increases the level of learning for all participants. Yet, research about learning in cohorts further indicates that cohort structures both can foster and impede learning.

Benefits to Learning in Cohorts

To determine if scheduling structures created differences in group dynamics, Reynolds (1993) compared data from two types of instructional formats: (a) cohort programs in which students took all or nearly all courses together, and (b) separate-course programs in which classes were intensively scheduled in time blocks of four or more hours. Reynolds found that cohort-based programs provide higher levels of cohesiveness and group interaction than traditional separate-course programs. Additionally, faculty reported observing greater peer-to-peer interaction and greater levels of task cohesiveness among students in cohort programs, which increased program completion rates, according to the faculty.

Using data derived from an analysis of reflective journals, Norris and Barnett, (1994) sought evidence of interdependence, group interaction, and purpose in student writing. Analysis indicated that students participating in cohorts reported mutual support and solidarity that increased group interdependence, significant personal growth and enhanced knowledge, and increased contributions to group development through greater individual empowerment.

A review of research about cohorts found anecdotal evidence that students in well-functioning cohort groups reported greater feelings of inclusiveness, more opportunities for collaboration and professional networking, and enhanced academic performance than they did in their previous higher educational experiences (Basom, Yerkes, Norris, & Barnett, 1995). Advantages of using the cohort structure cited by faculty included improved student-faculty relationships and opportunities for professional growth through increased intradepartmental cooperation. Further, the authors concluded

that the structure of cohorts potentially can provide adult students with feelings of inclusiveness that in turn benefit their learning by promoting and supporting collaboration.

In a national study of higher-education institutions using cohorts in their leadership preparation programs, faculty indicated perceiving their role as facilitators who tended to use a variety of instructional strategies to encourage students to assume greater responsibility for their own learning (Yerkes, Basom, Norris, & Barnett, 1995). Students in the study reported that their cohort experiences gave them a sense of belonging and social bonding, enhanced professional confidence, new collaboration and networking opportunities, and strengthened ability to reflect on practice.

Building on earlier research about learning in cohorts, Hebert and Reynolds (1998) used matched pairs to survey 395 students in cohort and non-cohort programs in 3 professional fields at 5 universities throughout the United States. Three dimensions of learning were examined: *cognitive outcomes* (knowledge acquisition, critical thinking, and aptitude gains), *affective outcomes* (values, attitudes, self-concept development, interpersonal relations, and career strategy activities), and *learning transfer outcomes* (job skills and professional competence used outside the academic setting). Their comparisons indicated "significantly higher cohort student learning in the affective domain" (p. 37), slightly higher cohort-student learning in the learning transfer domain, and mixed results in the cognitive domain. Further, their findings suggest that those who showed the greatest learning gains in cohorts were male students, younger adults, and those who were in the earlier stages of their programs. Hebert and Reynolds posit that cohort formats, in addition to multiple other influences such as students' personal goals,

pre-program experiences, and efforts toward achievement, "cumulatively affect learning" (p. 37).

Impediments to Learning in Cohorts

Through student interviews and paper-and-pencil evaluations of four cohorts in an educational-leadership doctoral program, Wesson, Holman, Holman, and Cox (1996) discovered that group dynamics changed over time and that each cohort developed its own personality. Students reported that collusion shut down learning, whereas cohesion facilitated higher levels of mental processing and introduced new ways of constructing knowledge. Additionally, to enhance learning within cohort formats the authors suggest that program designers and instructors (a) emphasize cohort activities to enhance group processing and reflection and (b) integrate multiple in-progress assessments to measure group development progress and elicit honest discussions about "what is going on" (p. 17).

Another study (Scribner & Donaldson, 2001) examined relationships between group dynamics and learning by focusing on a small group of students working on a performance-oriented project within an educational leadership preparation cohort. Findings indicate that group climate and norms, assumed or assigned roles of team members, and communication and problem-solving styles can impede learning, depending upon the individuals. Scribner and Donaldson posit that, even in well-functioning cohorts, attention must be paid to the dynamics of small groups (Tipping, Freeman, & Rachlis, 1995) assigned performance tasks to ensure that all participants engage in transformative learning.

Browne-Ferrigno (2001) conducted a yearlong study of practitioner growth during a principal preparation program delivered through a closed cohort. Using multiple data sources collected in real-time rather than only at the conclusion of the program, stages of the cohort's transformation emerged. Students reported that the intense, long-term associations with the same learners increased peer interaction and collegial support and created opportunities for developing professional relationships. However, they also reported in their evaluations at the end of the program that issues about group norms and cliquishness that developed during the group's early stages diminished learning opportunities for many students and lingered throughout the program.

Cohort cliquishness and exclusionary practices were found also in an action-research project about the status of cohorts at an eastern university (Teitel, 1995). Although cohort members in another study (Hatley, Arrendondo, Donaldson, Short, & Updike, 1996) described their cohort experiences in "overwhelmingly positive terms" (p. 10), several students in this study identified the need to establish group norms and develop peer trust early as a needed change in their cohort program.

Many programs now use cohort formats in distance-learning programs (Packard, Dereshiwsky, Venedam, & Fritz, 1995) to expand educational leadership preparation opportunities outside of campus programs. In a study of peer interaction within an online principal-licensure cohort drawn from rural areas throughout a western state, Choi (2001) found that the computer conferencing system and instructional design of the distance-learning cohort promoted community-building interactions. Yet, despite faculty efforts to create small learning communities (cluster groups organized by proximity) within the

cohort, only one of the five cluster groups achieved any long-term cohesion and peer support.

According to Barnett et al. (2000), interpersonal problems and conflicts among students are two disadvantages of using cohorts in educational administration programs. Because using the cohort model "does not ensure a true cohort will develop" (Basom et al., 1995, p. 19), careful attention must be given to group processing at the beginning of and throughout a cohort program.

Strategies to Improve Learning in Cohorts

Creating a cohort to deliver a graduate program eases some of the administrative difficulties related to class loads and curriculum planning. However, putting educational practitioners together as a student group does not ensure the development of a learning community. Careful attention must be directed toward creating a cohesive program (Barnett et al., 2000) and addressing diversity issues within cohorts (Barnett & Caffarella, 1992).

A well-functioning cohort represents a learning community (Senge, 1990). Senge posits that team learning occurs when group members perceive one another as colleagues, and, thus, treating fellow group members "as colleagues acknowledges the mutual risk and establishes the sense of safety in facing the risk" (p. 245). Through learning how to dialogue and discuss different perspectives, some supportive and some conflicting, members of a learning team can feel free to share views openly. Within a safe environment, learning becomes "playful" (p. 246) and new ideas can be presented, examined, and tested by the group.

Team learning within a cohort (Barnett et al., 2000) is enhanced when environmental influences are addressed and learner-centered instructional strategies (Hannafin & Land, 1997; Muth et al., 2001) are implemented. Because adults bring their distinctive perspectives and frames of reference to learning environments, it is critically important that faculty create inviting, risk-safe conditions so that everyone—students and faculty alike—can participate actively and engage in transformative learning (Browne-Ferrigno, 2001; Geltner, 1994; Lumsden, 1992).

Understanding Potential Environmental Influences

Adult learners can influence the learning environment through two broad types of "adverse baggage" (Mahoney, 1990, p. 51) that can interfere with the learning process. External influences include situations related to family, work, and community obligations, while internal influences refer to an individual's health, interpersonal conflicts, and attitudes toward a problem or situation. Issues related to a learner's perception of self-worth and ability as a returning student can also influence the learning environment. Mahoney believes that educators of adult students must be cognizant of such potential sources of interference and take necessary steps to diminish any negative influences in the learning environment.

Commuting adult students confront other external influences that can impede their learning (Ortman, 1995). University professors and instructors must consider adult-student work responsibilities and the challenges of travel during high-density commuter hours as well as the challenges of balancing coursework with managing households and caring for family members. Insensitivity to such issues can create motivational issues for students and dashed expectations for professors.

Age differences between midlife adults (those born between 1943 and 1961) and rising adults (those born between 1962 and 1981) also can create impediments to learning within groups (Grabinski, 1998). The central role for midlife adults is leadership, and their group issues include parenting, teaching, directing institutions, and using values. Grabinski also found that midlife learners often tend to debate and challenge authority. Further, this particular age group as a whole manifests a poor record of successful interpersonal relationships that can affect their success working on teams. For rising adults, their central role is activity. Their group issues focus on expanding their professional work, starting families, serving institutions, and testing their values. Rising adults seek creative, innovative educational settings. In each case, instructors need to vary their expectations, learning activities, and types of expected teaching-learning interactions to optimize learning outcomes.

Creating Risk-Safe Environments

Providing opportunities within a caring environment so that students can deliberate about and make sense of difficult situations also is important (Achinstein & Meyer, 1997). When students as well are provided guidance on how to critique constructively their own work and that of their peers, critical friendships and collegiality within groups can be created.

Additionally, since learning in classroom-like environments "is as much a socially shared undertaking as it is an individually constructed enterprise" (Lambert & McCombs, 1998, p. 39), social interactions, interpersonal relationships, and communication with others influence learning. It is crucial that learning environments be stable and built upon trust and care among group members.

Closed cohorts in leadership programs provide unique opportunities for adult learners to engage in "democratic, non-hierarchical" (Geltner, 1994, p. 13) learning communities in which all participants are valued and empowered. In advance, instructors need to reflect carefully on their own values and beliefs as individuals and on their behaviors and practices as educators. Empowering a cohort requires changes in the relationships not only among the learners but also between instructors and students through dissolution of traditional power relationships (Geltner, 1994).

Valuing Learners' Professional Experiences

Instructors who design educational programs for adult learners need to be cognizant of and address the special characteristics of adult students (Barnett & Caffarella, 1992; Muth et al., 2001). The special attributes of adult learners include the need for acknowledgment and use of students' experience, active involvement of the students in the learning process, implementation of a varicty of learning techniques to meet the multiple styles of experienced learners, and need for group affiliation. Barnett and Caffarella suggest four strategies that instructors can use to address the special characteristics of adult students in a cohort program: (a) integrate initial group development activities into early stages of a cohort program; (b) include reflective seminars in which students have opportunities to think about, analyze, discuss, and contrast what they are learning; (c) provide individual learning opportunities to support and encourage self-development; and (d) ensure long-term involvement with all members of the cohort to build group cohesion and enhanced learning opportunities.

Using Varied Learning Activities

Adult students occasionally develop blocks to learning, and therefore instructors need to stay attuned to that possibility and make necessary program adaptations to eliminate or diminish such learning blocks. Warren (1968) proposes that adult-learning programs be structured to foster the acquisition of facts, skills, and attitudes as well as the development of inner potential. By integrating a variety of classroom strategies, an instructor can eliminate blocks to learning while also developing group synergy and providing novelty and variety within the program (Warren). Examples of such strategies include the use of portfolio assessments (Muth, Murphy, Martin, & Sanders, 1996) that require reflection about professional practice and engagement of students in collaborative group learning and teaching (Geltner, 1994).

One of the challenges in designing a cohort program based upon learning through experiences is the selection of the kind of "present experiences that live fruitfully and creatively in subsequent experiences" (Dewey, 1938, p. 27). Citing Dewey and others, Muth (2000) compares traditional and contemporary viewpoints about aspects of learning: what is to be learned, how it is to be learned, what process is to be used, and what teachers and students should do. By developing expectations about problem-based learning activities linked to real problems of practice in K-12 schools (Ford, Martin, Muth, Steinbrecher, 1997), faculty enable students to begin early to use theories and develop skills needed in their future roles as school leaders. By integrating group action-research projects and appreciative inquiry activities into the curriculum, students learn the power of collaborative inquiry and the importance of careful use of data and reflection. By working together in various small-group and whole-class settings, students learn the

challenges of group dynamics when membership changes. "Collaborating on problems of practice is fundamental to learning to be a professional" (Muth, 2000, p. 15).

Other research advocates situated learning in classrooms in which adult learners engage in simulated group activities, group discussions, and critical reflection so that they can verbalize knowledge gained and engage in problem-solving approaches with experts in the field. Content, context, community, and participation are the main elements of situated cognition and collaborative classrooms for adult learners (Stein, 1998). Likewise, the preparation of future school leaders must include group-processing skills, problem-solving strategies, and problem-based learning (Lumsden, 1992). Further, problem-based learning provides many benefits, in particular mastery of leadership skills and capacity to make more informed decisions about being a school leader (Bridges & Hallinger, 1997).

Needed Research about Learning in Cohorts

Although noteworthy anecdotal data from students and faculty can be found about the benefits of using well-designed and implemented cohort programs in educational administration, empirical evidence currently is sparse on the long-term effects of cohort experiences on the practice of future educational leaders. On the front end, recommendations for improving preparation programs include (a) careful screening and selection of cohort participants, (b) continual attention to group-development processes, (c) integration of experiential activities and reflection into the curriculum, (d) collaboration between faculty and practitioners, (e) continuous assessments of student progress measured against clear standards and performance rubrics, and (f) modeling of exemplary learner-centered instructional strategies. Given the attention to program-

specific research already reported above, on the back end much remains to be done to determine the efficacy of cohort structures on performance in the field.

Measuring transference of cohort-based learning to professional practice in school leadership may be difficult, and it surely will be labor-intensive, costly, and time-consuming. Nonetheless, accountability for the effectiveness of professional development programs requires better data than passing rates on exams, career-placement results, or anecdotal data from graduates and faculty. Short-term and longitudinal studies are needed to trace and examine the transference of students' learning in cohorts to practice settings and to graduates' professional practices as educational leaders. But following career paths of program graduates is difficult without continuous upkeep of appropriate databases, and broad-based longitudinal studies that link findings from multiple sites require careful design and diligent attention by involved researchers.

Some General Questions for Researchers

Assuming (a) that difficulties inherent in longitudinal studies can be overcome, (b) that groups of leadership-program faculty will participate in such studies to enhance the efforts of isolated researchers and provide better data for program revision and justification, and (c) that knowing something about transference of cohort learning to professional practice is important, then questions need to be raised about what research is necessary and which strategies might be most effective in pursuing that research. For example, what data will best tell the field whether transference from program learning to field action takes place? How can this be determined during a program as well as following the completion of a program? What types of data sources will be most beneficial for such research? What types of databases will be needed to trace graduates'

career paths? Should such database development and use be program specific, or might it be advantageous to create databases for multiple sites, say statewide or regionally, to facilitate collection and use of cohort data nationwide?

Some Specific Questions about Learning in Cohorts

Advocates of cohorts often claim that they provide "better environments for learning," particularly for group learning that takes place over time. Is the continuity across collaborative learning experiences and academic terms made possible by cohort structures sufficiently analogous to how people learn in field settings that the probability is greater that what is learned in a program can be used in practice? If so, what are the best ways to determine this? Should, for example, studies be conducted that analyze work tasks in school settings to examine how work teams acquire and use knowledge and then compare these efforts to learning activities in cohorts?

Another question is whether researchers can identify ways in which cohort instructional design affects actual practice. That is, for example, what instructional processes facilitate learning about and doing leadership? During the course of a cohort program, do students engage in consequential learning activities that require leadership and actually affect practice in field settings? Or, do activities such as leading a curriculum or legal audit produce changes in system practices or support later leadership behaviors in diverse job circumstances? What are the best ways to capture these outcomes: observations, interviews, or some combination?

Can particular leadership skills be identified that students are expected to acquire during a program, and do these skills directly apply to improving school outcomes and transfer to other practice settings? In what ways does a given program encourage

reflection on one's leadership and its consequences? Further, are such reflective practices continued when no longer required by a program? Do program graduates continue to "journal" and think about and reflect regularly on their practice and its effects? If so, does reflective practice make any difference in how well a program graduate leads a school? What would be reasonable ways to examine whether leadership-skill acquisition or reflective practice transfer to on-the-job settings and have any effects?

Cohort advocates also claim that cohort experiences help develop professional networks that support graduates when they take administrative positions. Are data available that suggest that cohorts accomplish this any more effectively than do non-cohort preparation experiences? How might comparative analyses be structured? Could comparative "schematics" of networks developed by program graduates be examined for use and outcomes? And how might the effectiveness of such networks be assessed? Do they actually make a difference in how cohort graduates perform on a day-to-day basis once they are on the job?

Other Questions about Impact on Practice

What are programs, particularly cohort-based programs, doing to assure that students have the skills to improve, for example, classroom teaching? How can program designers and evaluators know, additionally, if a teacher improves because of a graduate's intervention? How do can a program then know that the teacher's improvement positively affects student outcomes? What measures can be used to determine these results? And how can programs determine how effectively cohorts support knowledge and skill acquisition in this area?

A Concluding Note

Of course, the questions can go on and on, depicting multiple arenas in which effective principals have to apply their knowledge and skills. And, can program instructors back track to preparation programs to see what learning opportunities might have led to or supported the outcomes of interest? On the other hand, can programs as well ask what knowledge, skills, and dispositions "make" an effective principal, perhaps using standard developed by various national and state agencies, and test whether cohort or other programs effectively implement opportunities to learn that connect to the standards? Further, is it possible to establish whether such standards and instructional practices actually have an impact on practice. In order to do this, though, programs will have to have clear plans at the outset of a particular cohort—or other—program that connect instructional intent with later outcomes.

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